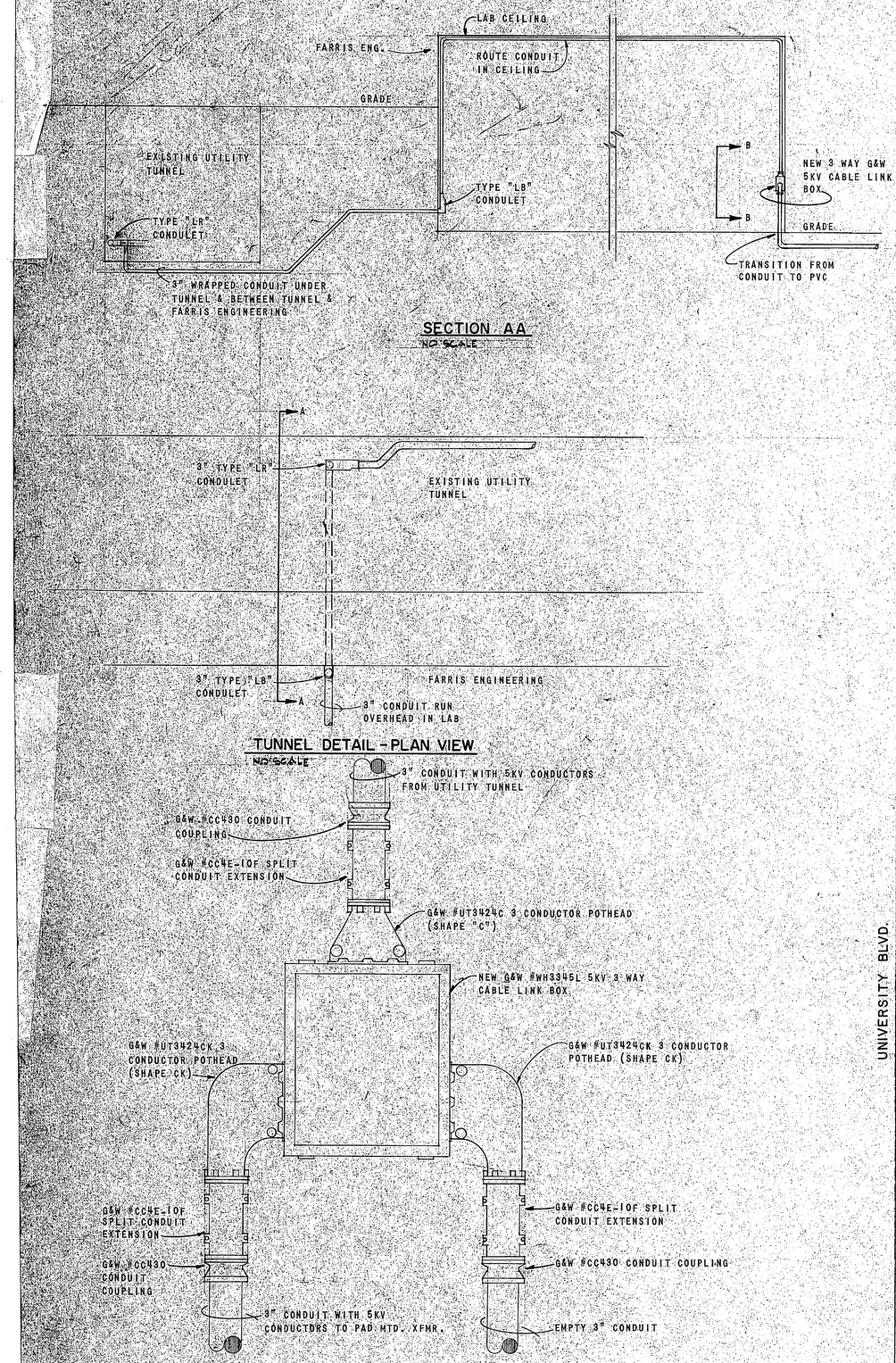
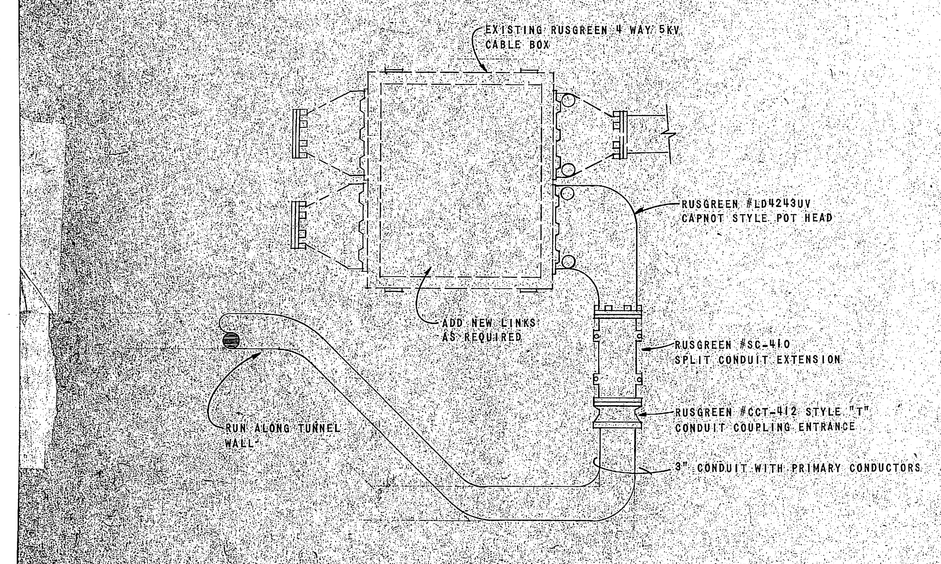


SECTION AA
NO SCALE

TUNNEL DETAIL - PLAN VIEW
NO SCALE

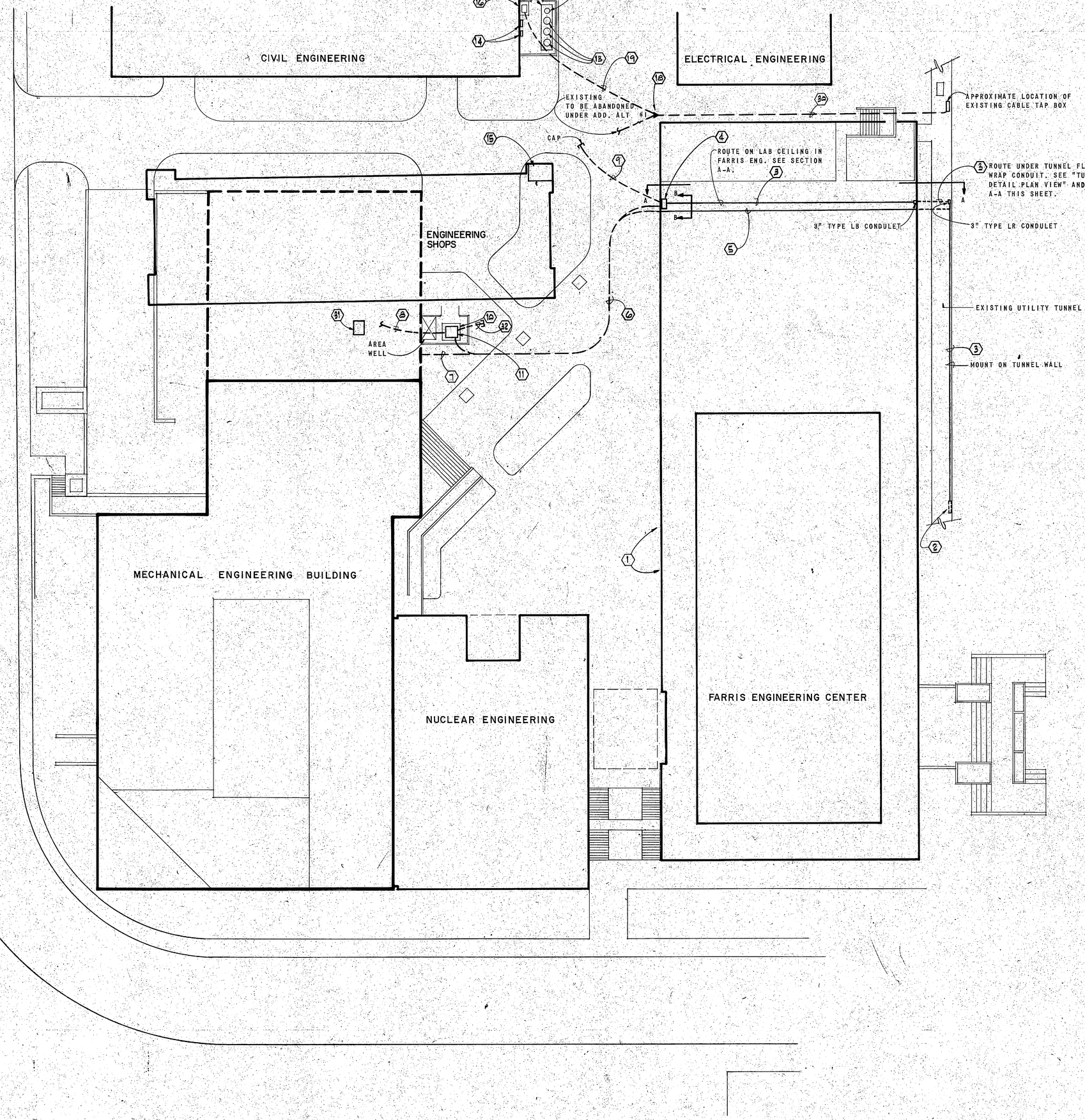
ELEVATION BB
No scale



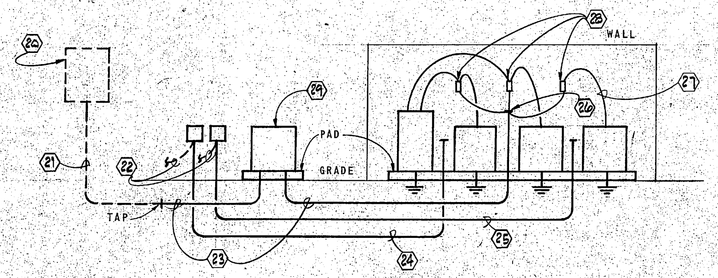
EXISTING CABLE TAP BOX DETAIL
NO SCALE

UNIVERSITY BLVD.

REDONDO DRIVE



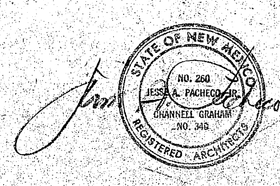
ELECTRICAL SITE PLAN
SCALE: 1"= 20'-0"



ADDITIVE ALTERNATE #1 POWER RISER DIAGRAM
NO SCALE

NOTES

1. REMOVE FOUR GLOBE TYPE OUTSIDE WALL FIXTURES LOCATED ON THE WEST SIDE OF FARRIS ENGINEERING AND REPLACE THEM WITH FOUR TYPE "S" FIXTURES.
2. APPROXIMATE LOCATION OF EXISTING 4 WAY 5KV CABLE TAP BOX. INSTALL NEW POTHEAD AND EXTEND 3#3/0 5KV CONDUCTORS AND 1#3/0 600 VOLT NEUTRAL DOWN UTILITY TUNNEL IN A 3" CONDUIT. SEE "EXISTING CABLE TAP BOX DETAIL", THIS SHEET.
3. 3#3/0 5KV CONDUCTORS AND 1#3/0 600 VOLT WHITE NEUTRAL (90°C) IN 3" CONDUIT.
4. NEW 3 WAY 5KV CABLE TAP BOX. SEE ELEVATION BB THIS SHEET.
5. ROUTE 3" CONDUIT FOR TELEPHONE AND 3/4" CONDUIT FROM FACP THROUGH FARRIS ENGINEERING TO UTILITY TUNNEL FOLLOWING THE SAME ROUTING AS THE NEW 5KV FEEDER.
6. 1-3" SCHEDULE 40 PVC (TELEPHONE), 1-3/4" SCHEDULE 40 PVC (FIREALARM), AND 3#3/0 5KV CONDUCTORS AND 1#3/0 600 VOLT WHITE NEUTRAL (90°C) IN 3" SCHEDULE 40 PVC. ROUTE CONDUITS AND FEEDER BELOW MECHANICAL PIPING WHERE POSSIBLE. ENCASE CONDUITS IN CONCRETE WHERE THEY ARE NOT INSTALLED UNDER THE MECHANICAL PIPING. SEE MECHANICAL PLANS FOR EXACT ROUTING OF MECHANICAL PIPING.
7. 1-3" SCHEDULE 40 PVC FOR TELEPHONE AND 1-3/4" SCHEDULE 40 PVC FOR FIRE ALARM ROUTED INTO BUILDING. SEE NOTE (6). SEE FLOOR PLANS FOR ROUTING OF CONDUITS IN BUILDING.
8. 4-3 1/2" CONDUITS ROUTED BELOW AREA WELL TO "MSB" EACH CONTAINING 4#500MCM TRHH, 1#4/0GND. SEE FLOOR PLANS FOR EXACT LOCATION OF "MSB". INSTALL 4 SPARE 3 1/2" CONDUITS.
9. EMPTY 3" CONDUIT EXTENDED FROM CABLE TAP BOX CAPPED AS SHOWN.
10. 6'-6"x6'-6"x12" CONCRETE REINFORCED TRANSFORMER PAD WITH PRIMARY AND SECONDARY OPENINGS AS REQUIRED.
11. 500KVA PAD MOUNTED OIL TRANSFORMER. SEE RISER DIAGRAM AND SPECIFICATIONS.
12. UNDER ADDITIVE ALTERNATE #1 INSTALL 9'x16'x12" REINFORCED CONCRETE PAD FOR RELOCATED SINGLE PHASE TRANSFORMERS FROM ENGINEERING SHOPS BEING REMOVED.
13. UNDER ADD. ALT. #1 THREE 50KVA SINGLE PHASE TRANSFORMERS FROM EAST WING TRANSFORMER VAULT OF THE ENGINEERING SHOPS RELOCATED TO THIS LOCATION TO SERVE THE CIVIL ENGINEERING 3 PHASE LOADS. SEE DETAIL THIS SHEET.
14. UNDER ADD. ALT. #1 ONE NEW THREE POLE AND ONE NEW TWO POLE WEATHER PROOF CIRCUIT BREAKERS TO MATCH EXISTING SIZES MOUNTED ON WALL TO SERVE CIVIL ENG. BLDG. EXTEND LOAD CONDUCTORS FROM CIVIL ENG. MAIN DISTRIBUTION PANELS TO NEW CIRCUIT BREAKERS.
15. UNDER ADD. ALT. #1 EXISTING 3-37 1/2KVA AND 1-75KVA TRANSFORMERS SHALL STAY IN OPERATION UNTIL AFTER THE OTHER 3-50KVA TRANSFORMERS, CIRCUIT BREAKERS, OIL SWITCH AND OTHER MISC. EQUIPMENT ARE LOCATED AND CONNECTED, AFTER WHICH THE 75KVA TRANSFORMER MAY BE RELOCATED TO THE NEW TRANSFORMER PAD AND THE PRIMARY FEED SHALL BE REROUTED TO THE NEW 5KV OIL SWITCH AS SHOWN.
16. UNDER ADD. ALT. #1 NEW 5KV 3 POLE GANG OPERATED OIL CUT-OUTS. GENERAL ELECTRIC #9F31YBA111. INSTALL 30A FUSES.
17. UNDER ADD. ALT. #1 RELOCATED 75KVA SINGLE PHASE TRANSFORMER. SEE NOTE (13).
18. UNDER ADD. ALT. #1 REROUTE AND EXTEND 2 1/2" CONDUIT CONTAINING 3#2 5KV CABLES AND 1#2 600 VOLT CABLE TO NEW OIL CUTOUTS. CONTRACTOR SHALL REPLACE CONDUCTORS WITH NEW FROM NEW OIL CUTOUTS TO EXISTING TAP BOX IN THE EXISTING UTILITY TUNNEL.
19. UNDER ADD. ALT. #1 NEW 2 1/2" CONDUIT EXTENDED FROM EXISTING 2 1/2" CONDUIT CONTAINING NEW 3#2 5KV CONDUCTORS AND 1#2 600 VOLT WHITE NEUTRAL (90°C).
20. EXISTING 5KV TAP BOX IN UTILITY TUNNEL.
21. EXISTING 2 1/2"C. WITH NEW 3-5KV #2 CONDUCTORS AND 1#2 600 VOLT 90°C WHITE NEUTRAL.
22. REROUTE AND EXTEND AS REQUIRED EXISTING SERVICE FEEDERS FOR THE CIVIL ENG. BUILDING TO NEW CIRCUIT BREAKERS.
23. NEW 2 1/2"C. WITH 3-5KV #2 CONDUCTORS AND 1#2 600 VOLT 90°C WHITE NEUTRAL.
24. EXTEND 3#350MCM AND 1#3 GND IN 3"C. FROM SECONDARY SIDE OF THE 75KVA TRANSFORMER TO NEW 2P CIRCUIT BREAKER ON WALL.
25. EXTEND 3#1, 1#6GND IN 2" CONDUIT FROM SECONDARY SIDE OF 3-50KVA TRANSFORMERS TO NEW 3P CIRCUIT BREAKER ON WALL.
26. INSTALL WEATHER PROOF CABLE BUSHING AT END OF CONDUIT.
27. #2 5KV NON-SHIELDED CONDUCTORS TO SINGLE PHASE TRANSFORMERS (TYPICAL).
28. THREE 5KV TERMINATORS FROM SHIELDED CABLE TO 5KV NON-SHIELDED CABLE. ELASTIMOLD #15TH SINGLE PIECE TERMINATORS. (TYPICAL)
29. NEW FREE STANDING OIL CUTOUTS (GANG OPERATED).
30. EXISTING PRIMARY FEEDER AND CONDUIT. UNDER ADDITIVE ALTERNATE #1 CONDUCTORS SHALL BE REPLACED WITH NEW.
31. APPROXIMATE LOCATION OF 3-50KVA SINGLE PHASE TRANSFORMERS TO BE RELOCATED UNDER ADDITIVE ALTERNATE #1 PRESENTLY IN ENGINEERING SHOPS.
32. 3" CONDUIT STUBBED OUT FROM PRIMARY SECTION OF PAD MOUNTED TRANSFORMER.



UNM MECHANICAL ENGINEERING BLDG.

SITE ELECTRICAL PLAN

pacheco and graham · architects

project	date	sheet
320/7627	11/20/78	C-5